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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,729	01/17/2001	John David Bacchiaz	9300-1	6624

7590 06/24/2005

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EXAMINER	
DANG, HUNG Q	

ART UNIT	PAPER NUMBER
2635	

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/764,729	BACCHIAZ ET AL.	
	Examiner	Art Unit	
	Hung Q. Dang	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *40-80* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *41,42,46,54-65,69-73,75,76,78 and 79* is/are allowed.

6)☒ Claim(s) *40,43-45,47-53,66-68,74,77 and 80* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 January 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to application's amendment received on 3/7/2005. The amended claims 41, 42, 46-48, 51, 69, 70, 72, 73, 75, 77, 79 and the added claim 80 have been entered.

Response to Arguments

2. Applicant's arguments regarding claim 40 in the first and second paragraph of page 18 have been fully considered but they are not persuasive. Applicant argues that the Cockburn reference does not disclose a circuit board being directly connected to contacts 9 or 10. However, page 2 lines 13-18 of Cockburn reference indicates electronic means for digitizing the pattern of ridges on the surface of the holder's thumb. Even though, Cockburn does not specifically mention a circuit board, however, one skilled in the art would recognize that electronic components have been commonly manufactured on circuit boards, as evidenced by Nakamura. Therefore, it would have been obvious to provide a circuit board to the biometric key taught by Cockburn.

Even though, Cockburn in view of Nakamura does not specifically teach an insulator within the key body to enclose said circuit board, however, one skilled in the art would recognize that to provide an insulator around said circuit board would have been obvious in order to protect said circuit board from getting short circuit.

Applicant's arguments with respect to claims 69, 70 and 72 have been fully considered and are persuasive. The rejections of claims 69-72 have been withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 40, 43, 44, 45, 47-53, 66-68, 74, 77 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cockburn U.S. patent 5,055,658 in view of Nakamura et al. U.S. Patent 5,592,169.

Regarding claims 40, 45 and 47, Cockburn teaches a biometric key (Figure 1, unit 7) in the form of a mechanical key (Figure 1, unit 5) having a key body incorporating a biometric sensor (Figure 1, unit 7) for transmission of a signal represented by a biocode of data generated by the biometric sensor, said key body engageable with a mechanical lock body (Figure 1, unit 12) and having one ore more electrical contacts (Figure 1, units 9 and 100) for engaging mating electrical contacts of the mechanical lock body whereby in use said signal is forwarded to processing means (Figure 1, unit 2) interfaced with or electrically connected to the mechanical lock body for granting access to an authorized user to a facility (Figure 1, room access) accessible by the biometric key upon engagement of the key body with the mechanical lock body characterized in that the sensor is surrounded by an insulator in the key body and the sensor is electrically connected to a circuit board associated with the insulator which circuit board is electrically connected to said one or more contacts (column 2 lines 10-18).

However, Cockburn does not specifically teach said key body covered by an insulator.

Nakamura et al. also teaches a key, wherein the key body is covered by an insulator (column 2, lines 30-35), to insulate the electronic circuitry inside said key body.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an insulator to the key body of the key disclosed by Cockburn, as evidenced by Nakamura et al., in order to insulate the internal circuitry of said key.

Regarding claim 43, Cockburn also implies the biometric sensor (see figure 1 unit 7) being accommodated within a mating recess of the key body.

Regarding claim 44, Cockburn also implies the circuit board being accommodated within a cavity of the insulator.

Regarding claim 48, Cockburn also teaches insulator sleeve being aligned to a longitudinal axis of the key body.

Regarding claim 49, the key body disclosed by Cockburn also includes a gripping part incorporating the biometric sensor and a blade portion (See Figure 1).

Regarding claims 50 and 74, the blade portion disclosed by Cockburn also includes a plurality of wards.

Regarding claim 51, the key blade taught by Cockburn also has a shape of a plate. Key blades not including wards have been commonly done, as evidenced by Nakamura et al. Therefore, by conventionality, it would have been obvious to one of

ordinary skill in the art to provide a non-wards key blade to the biometric key disclosed by Cockburn, as evidenced by Nakamura et al.

Regarding claim 52, even though Cockburn does not specifically teach each of said contact comprises a pair of pins, however, one skilled in the art would recognize that using pins as a means of electrical contacts have been commonly applied in electrical systems. Therefore, by conventionality, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide pins to each of the contacts on the key blade disclosed by Cockburn in view of Nakamura et al. in order to electrically connect said key with the processing means of the lock.

Regarding claim 53, the key body disclosed by Cockburn also incorporates a smart chip (column 2, lines 13-16).

Claim 66 is rejected for the same reasons as claim 40.

Regarding claim 67, Cockburn also teaches the movable part is a door (Figure 1, "room access" implies there is a door") of a facility and the receptor body (Figure 1, unit 12) is attached to said door.

Regarding claim 68, Nakamura et al. teaches a key having a blade portion not incorporating wards (See Figure 1) which engage with a mating slot of the receptor body. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a non-ward key blade to the key disclosed by Cockburn, as evidenced by Nakamura et al., in order to insert said key blade into a non-ward slot.

Regarding claim 77, claim 77 is rejected for the same reasons as claim 40. Cockburn also teaches the enrollment of an authorized biometric signature taking place by initial engagement of said biometric key with said receptor body and actuation of the biometric sensor for automatic generation of a signal representing said biocode of data which represents said authorized biometric signature which is then captured into a database (column 2 lines 22-45 and column 4 lines 5-12).

Regarding claim 80, the key body disclosed by Cockburn also has an inbuilt processing unit (column 2, lines 13-18).

Allowable Subject Matter

5. Claims 41, 42, 46, 54-65, 69-73, 75-76, 78 and 79 are allowed.

Regarding claim 41, the prior arts of record fail to teach or disclose a biometric key as claimed in claim 41, wherein the insulator is insertable into a slot of the key body and attached thereto.

Regarding claim 42, the prior arts of record fail to teach or disclose a biometric key as claimed in claim 42, wherein the insulator is slidably attached to the key body and bonded thereto.

Regarding claim 46, the prior arts of record fail to teach a biometric key as claimed in claim 46, wherein the insulator incorporates a plurality of contacts portals in contact with corresponding contacts or wire leads of the circuit board.

Regarding claims 69, 70 and 72, the prior arts of record fail to teach a biometric key as claimed in claim 69, wherein the signal representing a biocode of data generated

by the biometric sensor is automatically generated upon engagement with the mechanical key and the mechanical lock body and forwarded to the processing means.

Regarding claims 73 and 75, the prior arts of record fail to teach a biometric key as claimed in claims 73 and 75, respectively, wherein the receptor body includes i) a movable component or lock cylinder having said contact(s) and ii) a barrel for retention of said movable component wherein said barrel has contacts for engagement with said contacts of the movable components or lock cylinder for transmission of the signal.

Regarding claim 54, the prior arts of record fail to teach or disclose a mechanical lock body engageable with a biometric key which incorporates a biometric sensor for transmission of a signal representing a biocode of data generated by the biometric sensor as claimed in claim 54, wherein the mechanical lock body has I) a movable component or cylinder having one or more contact portals for engagement with corresponding contacts of the biometric key when said key is engaged with the movable component or cylinder; and ii) a barrel for retention of said movable component having contacts for engagement with the contact portals of the movable component or cylinder whereby in use the signal is forwarded to processing means interfaced or electrically connected with the barrel upon engagement of the biometric key with said movable component automatic generation of the signal for granting access to an authorized user of a facility accessible by the biometric key.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571) 272-3069. The examiner can normally be reached on 9:30AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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